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MACHINE BUILDERS DOUBLE PREWAR PRODUCTION; LENINGRAD, SVERDLOVSK PLANTS ACTIVE

FIGURES FOR METALLURGICAL EQUIPMENT, EXCAVATORS AMONG HIGHEST -- Moscow, Vestnik Statistiki, Sep/Oct 50

During 1949, over 300 important new high-duty machines and mechanisms were put into series production by machine builders of the Soviet Union. The Five-Year Plan for production of machines, mechanisms, and instruments is being exceeded. During 10 months of 1950 over-all machine-building production surpassed the prewar level 2.2 times; for metallurgical equipment it increased 5 times; output of steam turbines, 2.5 times; heavy electric motors, 5 times; petroleum industry apparatus, over 3 times; and excavators, 13 times.

TECHNOLOGICAL ADVANCES ACCOMPANY NEW PRODUCTION -- Leningradskaya Pravda, 3 Mar 51

In 1949, Leningrad industry attained its prewar level of production, and by 1950 the average daily volume of output was 26.9 percent above the 1940 figure. City enterprises fulfilled their Five-Year Plan 106.3 percent. During 1950, production was launched on 315 new items, including high-duty steam turbines and hydroturbines, turbogenerators, hydrogenerators, electric motors for alternating and direct current, welding units, polygraphic, textile, and shoemaking machines, optical and mechanical instruments, electrovacuum products, and X-ray units. Special steels, abrasives, optical glass, and industrial porcelain were also produced, as well as special machine tools, smelting aggregates, hoists, and automatic machines.

Special attention was given to high-speed methods of metal cutting and smelting, automatic welding under flux, gas cutting, cold upsetting of bolts and screws, advanced methods of soldering, rolling of threads on rods, and the utilization of stamping in place of free forging. Electrical metal-processing methods were broadly applied. Electric-spark hardening, electromechanical cutting, electric-contact soldering and sharpening, electric-arc hard-surfacing of

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tools with high-speed cutting steel, and heating and drying by high-frequency current and infrared rays were successfully utilized in production. Die casting, chill casting, and precision casting methods were taught and applied.

One of the most outstanding of the Leningrad enterprises, the Kirov Plant, has made considerable advances in technology. It fulfilled its 1950 plan for both gross and commercial production, and produced skidding tractors according to plan. The plant has successfully established production of petroleum and oil pumps, molding machines, and subway excavation shields. During 1950, its labor productivity rose 19.5 percent above the 1949 figure.

The Elektrosila Plant imeni Kirov has successfully fulfilled its Five-Year Plan for gross and commercial production, and has put into production some new electric motors and some turbogenerators with hydrogen cooling systems. Efforts of patternmakers have resulted in a 60-percent reduction in the time of manufacturing bases of hydroturbines for the Stalingrad and Kuybyshev GES.

In 1950 the labor productivity in Leningrad enterprises was boosted 16.1 percent above the 1949 record, while the year plan for labor productivity was fulfilled 106 percent. There was considerable reduction in costs of commercial production in 1950. The greatest reductions over the 1949 figures were effected by the transportation-machine building, heavy-machine building, and instrument-building plants, as well as plants of the food industry and of local industry. Rejects were reduced, and the quality of products was improved.

New technology adopted in Leningrad plants has been instrumental in effecting savings in materials and fuel. New methods of cutting rolled sheet for exhaust parts of steam turbines and condensers saved the Plant imeni Stalin a considerable amount of metal during the year.

During 1950, the Elektrosila Plant imeni Kirov put into production 70 types of new electric machines and 30 types of apparatus, and produced generators for the Dnepr GES imeni Lenin.

Unfortunately, the educational level of young Leningrad workers is not as high as it should be. In the Kirov Plant, for example, over 5,000 young workers have not completed the seventh year of school, and only 713 are now attending school.

MANY STAKHANOVITE SHOPS AMONG SVERDLOVSK PLANTS -- Moscow, Vechernyaya Moskva, 30 Jan 51

Industrial enterprises of Sverdlovsk met their year plan on 17 December. Many of the city's plants have won Stakhanovite ratings for their shops. Among these plants are the Uralmash, the Uralelektroapparat, the Bearing, the Turbomotor, the Optics and Mechanics, and the Road-Machine-Building plants.

Among the products of Sverdlovsk are ferrous and nonferrous metal, drilling units, motors, turbines, ore loaders, bearings, rubber and cable products, and instruments.

The Uralmash Plant sends equipment to construction sites on the Don and Volga rivers, to the Ukraine, the Crimea, and the Turkmen SSR. Among these products are 3-cubic-meter-capacity electric excavators and walking excavators of 14-cubic-meter capacity.

In 20 years, the city of Sverdlovsk has grown sevenfold.

POOR-QUALITY EXCAVATORS BRING COMPLAINTS -- Kiev, Pravda Ukrainy, 17 Feb 51

The Novo-Kramatorsk Plant imeni Stalin has been given the task of building heavy earth-moving machines, shut-off devices and hoist mechanisms for dams, and hydrotechnical equipment for the great hydroelectric construction projects. The plant must produce about 20,000 tons of special parts for hydroturbines for the power stations, including packing for turbines and guide and bearing rings 15 meters in diameter, weighing up to 115 tons.

The plant has built heavy walking and crawler-mounted excavators for work on the dams and canals. The 3.5-cubic-meter excavator which until recently the plant put out by individual production methods has now gone into series production.

An outstanding product of the plant is its heavy excavator having a steel bucket of 15-cubic-meter capacity. It can dig enough earth in one hour to fill 50 railroad cars, and its operation demands the functioning of over 500 various high-duty attachments and instruments. The machine is so big that it could not be assembled in the plant's shops, but had to be erected in the open area near the plant, using a traveling steam crane and various tackle rigs.

The plant acknowledges that it fell short of full utilization of available reserves for rapid and high-quality fulfillment of orders from the great construction projects. During 1950, the plant did not complete its excavators and draglines within the specified time limits.

Construction workers on the site of the Volga-Don navigation canal have complained to the plant, demanding improvements in the quality of the 3.5-cubic-meter-capacity walking excavators. The plant is now taking the necessary steps to produce excavators with the needed improvements.

The Novo-Kramatorsk Plant is one of the main suppliers of shut-off devices and hoist mechanisms for dams and sluices for the great construction projects. During 1950, the plant made a number of mechanisms of 100-to 300-ton lifting capacity for hydrotechnical installations being built on the Volga, the Dnepr, and other rivers of the country.

During the first quarter 1951, the plant must build several large stators for the construction of the Tsimlyansk GES. The management has resolved to fill this order one month ahead of schedule, on 25 February. The shaped-castings shop has completed the casting of the first stator. It has a diameter of 11.5 meters, and required 154 tons of molten metal for the casting.

The new turbines of improved design which will be installed at the Kuybyshev, Stalingrad, and Kakhov hydroelectric stations are being made of castings and forgings from the Novo-Kramatorsk Plant. -- I. Katerinich, director, Novo-Kramatorsk Plant imeni Stalin

METALLURGICAL EQUIPMENT COMPLETED EARLY -- Moscow, Moskovskaya Pravda, 23 Feb 51

The reduction-mechanism shop of the Novo-Kramatorsk Plant in Elektrostal' recently completed work on a multiple-ton geared stand for a tube mill, to be shipped to a plant in the south. Assembly was completed 3 days ahead of schedule.

The assembly of a charging machine is also running ahead of plan.

Machinery assembly shop No 1 has completed the assembly of a roller conveyer for Urals metallurgists ahead of time.

The plant is turning out universal winches and walking excavators in strict accordance with the plan.

PUT OUT ABOVE-PLAN BORING TOOLS -- Alma-Ata, Kazakhstanskaya Pravda, 28 Feb 51

During 18 days of February, the ferrous metallurgy shop of the Alma-Ata Heavy-Machine-Building Plant turned out 73 tons of boring tools, as against the planned figure of 66 tons. The tenth railroad car load of these tools will leave the plant on 29 February.

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